



# NEWS

**Geological Society of Minnesota**

MINNEAPOLIS, MINNESOTA



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FIRST CLASS



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Dr. Matt Walton  
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1633 Eustis St.  
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January, February and March 1979

#### OFFICERS

PRESIDENT	Robert Handschin	2029 Edgerton Rd. St. Paul	774-1431
VICE PRES.	Barbara Gudmundson	5505 28th Av. S. Mpls.	722-9132
SECRETARY	Dwight Robinson	1405 Hamline Ave. N. St. Paul	848-5913
TREASURER	Patricia Wigton	3349 Pierce St. N. E. Mpls.	781-0733
DIRECTORS	Myrtle Fore	4356 30th Ave. S. Mpls.	722-6650
	Allen Lundgren	765 Redwood Lane New Brighton	633-5442
	Mark Jefferys	9509 5th Ave. S. Mpls.	888-1274
	Marlys Lowe	2206 Caroline Lane So. St. Paul	451-2822
	Henry Gangl	2925 Sumpter Ave. N. Mpls.	545-3912

## Highlights of the BOARD

### Officers for 1979 are elected

The 1978 Board of Directors has elected as President Bob Handschin, who served as Vice-President in 1978; Vice President, Barbara Gudmundson; Secretary, Dwight Robinson; and Treasurer, Pat Wigton.

Biographies of the 3 new Board Members elected at the September Annual Meeting follow:

Pat Wigton is a dietetic administrator by profession. Gerencie Leppel invited her to try a GSN lecture at a University 'sampler' lecture they both attended. The topic that winter was the origin of life. The primeval soup was almost too much to swallow for Pat whose appetite for biochemical formulae is very quickly satisfied. Undaunted, she returned for more the next year when she decided to join the GSN. This year she will serve as Treasurer.

Henry Gangl is an engineer with the Honeywell Corporation. He attended Queens College in New York and Manchester Institute of Engineering in England, served in the Army Corps of Engineers during WW II and has an active interest in politics. His interest in GSN was spurred by a rock show at Brookdale in 1974. He has been a member ever since.

Dwight Robinson loves dinosaurs and their ilk with a passion that almost led to a career in paleontology. Bugs and other living things won out. He now works as an entomologist for the State of Minnesota watching war on the elm bark beetle carriers of Dutch elm disease. The GSN has provided a continually stimulating outlet for geological interests. He discovered GSN at the State Fair in 1975 and has been a member ever since.

A SKETCH OF THE ORIGINS OF THE GEOLOGICAL SOCIETY OF MINNESOTA

A Talk Given to the 40th Annual Meeting, September 25, 1978

By Robert Handschin, Vice-President

The Geological Society of Minnesota was incorporated October 28, 1938. Its forerunner, the Geological Society of Minneapolis was launched by Edward P. Burch in January, 1938 with 20 charter members, most of whom had taken geology courses at the University of Minnesota.

The first winter there were 8 lectures, held then as now, on Monday nights. During that spring and fall there were some 43 field trips, mostly one day, with an average of 23 persons per trip. In the fall another 12 lectures were held, making 20 for the year with an average attendance of 47. As a result of this outburst of activity, membership had already grown by the end of the year to 147!

What made such phenomenal growth possible? The answer seems to have been a man, a place and the times. Let me explain what I have learned so far of the forerunners and the beginnings of our Society, from our many Society records and from interviews with long-time members.

The man who brought forth the Society was Edward P. Burch, born in western Wisconsin in 1870, and died in 1945 after living most of his adult life here in Minneapolis. In 1892 he was in the second class of electrical engineers to graduate from the University of Minnesota. He immediately went to work as chief engineer for the Twin City Street Railway Company, then in the throes of replacing horse cars with electric trolleys.

Over the next 35 years he became a nationally known authority in the design and building of street car lines, interurban lines and their power plants. He served as a professor and had his own consulting business, as well. When he helped to electrify open pit mines on the Range, he came in touch with mining aspects of geology.

Later he made designs for lowering the Milwaukee railroad tracks in south Minneapolis. In order to do that he had to find out what the underlying structures were. Hence he investigated the geology of the Twin Cities area, made a study of well drilling records and many on-the-spot inspections of rock exposures.

When the Great Depression shut off professional employment, Professor Burch turned to geology as a new activity, enrolling in the University as a special student during four winters, from 1932-36, and going on field trips with the classes even though he was already in his sixties. Such things were seldom done in those days. Following up on his earlier study of well records in Minneapolis, he wrote many letters to locate all available well records in the metropolitan area. This information was used in a 1935 report on the geology of the area by Professor George M. Schwartz, later head of the University Geology Department.

Con't next page

NEWS NOTE: The New Orleans Geological Society has 1400 members and claims to be the second largest in the country. Anyone know which one is first?

- 3 -

## MEMBERS AWED AT OMNITHEATER

Forty members of GSM were treated to a spectacle of sight and sound that few have been privileged to see on last November 19. The Omnitheater program features the birth and evolution of the Universe with our own Mother Earth cast in a starring role.

In keeping with the new spirit of active visitor involvement at the Museum, all cinematic technological apparatus is there to see. The main feature, appropriately enough, is called GENESIS and is cast onto a 180° domed screen overhead by means of a gigantic projector called the Omnimax. Roughly translated into English, Omnimax means everything big. And Big it is. You are there-- thrust into the midst of an erupting volcano or floating almost timelessly over mountains or through the Rift Valley of Africa.

You can do all this from a comfortable, reclining seat conveniently provided with arm rests for gripping when necessary. If you are weary of Hollywood, pop-gun geological epics the likes of "Earthquake", this is for you.

A word of warning, however, it is a savory blend of science and art that must really be seen twice or more to get the full impact. You may want to have a dramaine handy. Air bags are not provided, but the Omnimax people are skilful pilots. You really shouldn't need one. Rates and times are available by dialing 221-9400.



### History, con't

As a prominent engineer with wide acquaintance in the Twin City business community, enthusiasm for his new vocation soon attracted a number of his friends, engineers and others, who were looking for an outdoor hobby, especially one which could be enjoyed by husbands and wives together. His intense interest in learning more about geology took him to many parts of the country, as well as to Cuba and Mexico. This made his knowledge of geology more interesting to those who knew him.

It was from this nucleus of friends that the Society was born, but it would never have grown so rapidly without Burch's do-it-yourself, practical leadership. He remained the driving force of the Society until his death, 7 years later while on a trip to Cape Cod. The first geological highway marker by the Society, erected at Taylors Falls in 1949 was dedicated to his memory, but the Society itself was his real memorial. The pattern of its activities which he established has lasted 40 years, and may well prove to be good for many years to come.

(To be continued)

## RECENT PUBLICATIONS

There are a number of publications available to individuals from State Geologic Surveys. Among those recently obtained were some excellent ones from Iowa: "A Regional Guide to Iowa Landforms", by J. C. Prior, and "Minerals of Iowa", by Paul J. Horick. I don't have the individual prices, but the combined price, plus shipping charges, was \$4.10. In addition, they have the following free leaflets:

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| 1. Geodes                                    | 5. Maquoketa Caves                        |
| 2. Rock and Mineral Collecting Areas in Iowa | 6. Physiography of Iowa                   |
| 3. Economic Geology of Iowa's Rock Materials | 7. Quaternary Terrain and Materials (Map) |
| 4. Rocks and Minerals of Iowa                | 8. Bedrock of Iowa (Map)                  |
|  | 9. Relief Map of Iowa                     |

These are all excellent. The first, "A Regional Guide to Iowa Landforms" is very fine! Minnesota should take heed of that one, and "Minerals of Iowa". These can be obtained by writing to Iowa Geological Survey, 123 N. Capitol St., Iowa City, Iowa 52242.

Michigan Department of Natural Resources has some publications available, too. Those that might be of interest are:

1. BU 6 Mineralogy of Michigan (1976) \$3.00
2. PA 3 Guide to Michigan Fossils (Free)
3. PA 6 Collecting Rocks, Minerals and Fossils in Michigan (Free)
4. CH 1 Morainic Systems of Michigan (Free) (Map)
5. CH 2 Bedrock of Michigan (Map) (Free)

These can be ordered from "Information Service Center", Michigan Dept. of Natural Resources, Box 30028, Lansing, Michigan 48909.

Another bulletin we've received recently is "Collector's Guide to Mineral and Fossil Localities in Utah", published by the Utah Geological Survey (\$2.50). The areas we are familiar with seem to be accurate, but a national mineral magazine (Rock and Gem, Nov. '78), criticized it severely for inaccuracies. They pointed out that the U.G.S. information was mostly word of mouth. The information, apparently, had not been verified by the U.G.S. I guess the information is only as good as the source of the mouth. However, the areas in which we've been, seem to be described accurately, although we haven't kept accurate mileage records to check on it. Be wary! The address is: Utah Geological Survey, 606 Black Hawk Way, Salt Lake City, Utah 84108.

Subscribers to the defunct "Fossils" magazine may be able to get help from Publisher's Clearing House to get a substitute magazine. Write Mr. Robert H. Treller, Publisher's Clearing House, 382 Channel Drive, Port Washington, New York 11050.

### PAMPHLETS ON ONTARIO, CANADA

Bob and Emilie Handschin, on a visit to the Thunder Bay, Ontario area, picked up many attractive geology pamphlets from the branch office of the Ontario Ministry of Natural Resources. Any member who would like to see them or consult the Provincial publications list, give Bob a call, at 774-1431.

# welcome

## NEW MEMBERS

Sophie Wojtysiak 384 N. Cleveland St. Paul 55104	647-1302
Patrick R. Leacock 1235 Brighton Square New Brighton 55112	636-2473
Walt Handschin 2029 Edgerton Rd. St. Paul 55117	774-1431
Mrs Robert Schmid 164 Montrose Place St. Paul 55104	645-4298
J. Eric Anlgren 86 Seymore Ave S. E. Minneapolis 55414	378-9366
Ellen Olson 1909 Emerson Ave. S. Minneapolis 55403	377-9827
Mrs Fred Gordon 79 Grove St. Mahtomedi 55115	428-2118
Gail Easthouse 4800 Utah Av. N. Minneapolis 55428	537-7022
Norman D. MacDonald 9118 Fox Run Circle Eden Prairie 55344	941-6302
Richard Uthe 2050 N. W. 14th St. New Brighton 55112	631-9677 or 373-3715
Judith S. Ylvisaker 1219 Lakeview Ave. S. Minneapolis 55416	

## FORMER MEMBERS

Lorraine & Valentine O'Malley M.D. 1960 Summit Av. St. Paul 55104	
Donald Ruffenach 3630 Queen Av. N. Minneapolis	521-7330
Paul & Beverly Vogt 4941 S.W. 60th Place Portland Oregon 97221	(503)292-6934

## Remember

### Renewal Time

Unless you have already paid your 1979 dues, your membership lapsed as of December 31, 1978.

You may give your money to Mary Kimball at the lecture or send to her home, 1711 Marshall Ave. St. Paul, Minn. 55104.

### In Memoriam

We note with regret the death on September 11, 1978 of Helen McBroom Mayo, wife of Sam Mayo who served as president of our society in 1971.

As head of the public service committee, he helped to get geological information included at rest stops and information centers on the highway system.

#### CANOE TRIP IN SANDSTONE AREA

The final field trip September 9-10, was an "exciting experience", according to Pearl Downey. It was a canoe and hiking exploration of the Kettle River. Nine members, the most who could be accommodated, were guided by Steve Olson, staff member of the Audubon Center on Grindstone Lake near Sandstone. Some of the highlights were going through deep rock cuts of the River, exploring the mill dam in Banning State Park, and seeing a beaver dam there. Long-time members, Eva O'Leary, Grace Benz and Pearl shared one canoe. Six new young members, including Virginia Baker, her son, and Cec MacDonald, made up the rest of the flotilla. The river trip was a relief from the extreme September heat, as well as a chance to see some geology sites from a different point of view. 1978 was the fifth year in which Audubon Center has served as host and organizer of geology and nature studies throughout Pine County. It was a rare opportunity to get a holistic view of an interesting area of our state.

#### GUNVILLES RAFT THE COLORADO RIVER

Bob and Marcia Gunville had a rare opportunity in late summer. Close friends invited them to go along on a raft trip down the Colorado River. This expedition through the Marble and the Grand Canyons was sponsored by California Institute of Technology. Four Caltech geologists, all experts on the Grand Canyon, and their wives, accompanied the small group. Bob said their trip started on a relatively low key and built up steadily to higher and higher levels (or should we say deeper and deeper levels - editor) of scenery, of geologic interest, of variety and of excitement. "There was no anti-climax", he declared, "other than the wish for more when the trip ended 180 miles downstream."

#### Members of Board Chosen at Annual Meeting

At the annual meeting in September Marlye Lowe, Barbara Gudmundson, and Robert Handschin were re-elected for two year terms. Dwight Robinson was elected for a two year term to replace Robert Miller who resigned. Pat Wigton and Henry Gangl were elected to one year terms to replace Sr. Joan Kain and Robert Leacock whose terms expired.

Charles Matsch's new documentary, Fire, Earth and Water, was shown at the meeting. It shows how natural forces shape the earth's crust. Shots of volcanic eruptions near Iceland, effects of glaciers in Minnesota were included.



-6-

recollections of a Visit to the Audubon Center  
at Grindstone Lake, Minnesota in September 1978

Grace Benz and Pearl Downey were the last to arrive about 9:30 a.m. due to making several wrong turns.

We were surprised to see such a small group (about 9), but Steve, our leader, assured us that it was ideal because we could use the small ones to pull the boats.

Steve gave us several options, but we decided on canoe trips. The first day we canoed and ate lunch at St. Croix State Park and explored the Kettle River area.

The second day we drove to Banning State Park, a delightful experience, where the river has worn a beautiful valley through some gigantic rocks. We hiked a short distance to visit an old mill. We canoed down the Moose (I think) River a short distance but our canoe couldn't make the entrance into the Snake River so a couple of us got wet. However this was an asset because it was a 90° day. Later we crossed a large dam by canoe to see a real beaver dam, which was interesting because of the skinned logs which were a pretty yellow.

Back at the Center Mrs. Link provided the usual delicious food.

After dark we walked out to the swamp to see by moonlight and flashlight the beautiful spider webs on the bushes, like lace cloths. A raccoon accompanied us in the moonlight. A deer was a joy around the lodge to welcome us and eat from our hands.

Most of the group were young and new to the Center. I hope they enjoyed it as much as I did.

Pearl Downey

Editor's Note: This came at the last minute but I thought two versions of the same trip were worth while.

Speleologists to Meet

The Minnesota Speleological Society will present a program on caving in Mexico on Thursday, January 25, 1979. The slide show and talk on Bustamante will begin at 8PM in 110 Pillsbury Hall on the Mpls. Campus of the University of Minn. For further information contact Edward Zawlocki at 525-9420.

